



MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

October 27, 2017

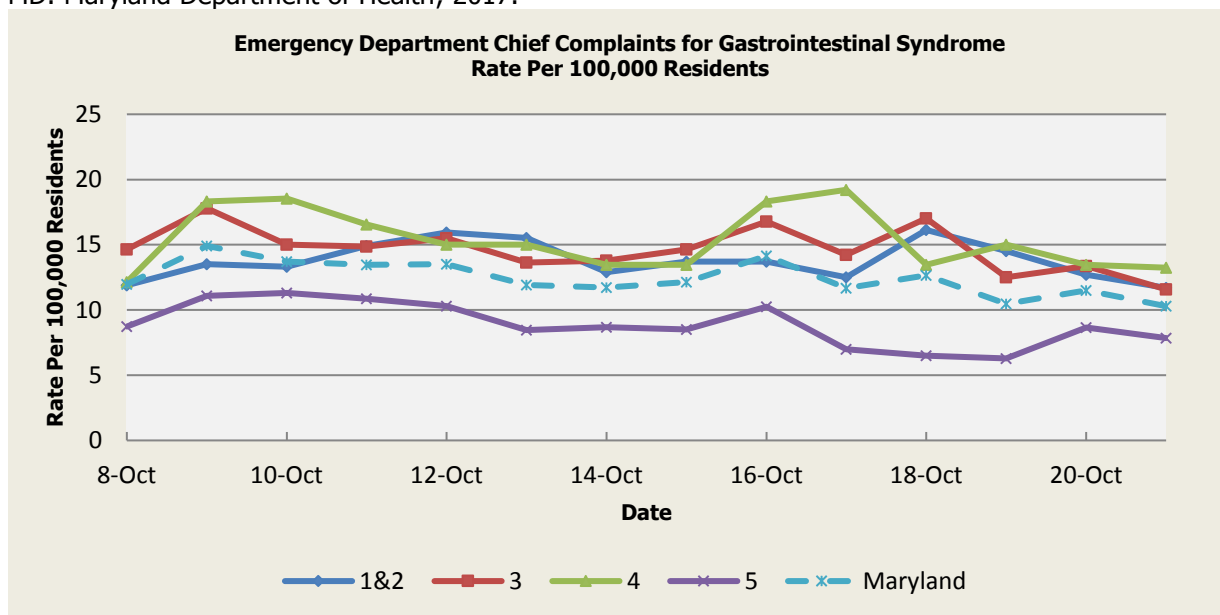
Public Health Preparedness and Situational Awareness Report: #2017:42 Reporting for the week ending 10/21/17 (MMWR Week #42)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts
Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

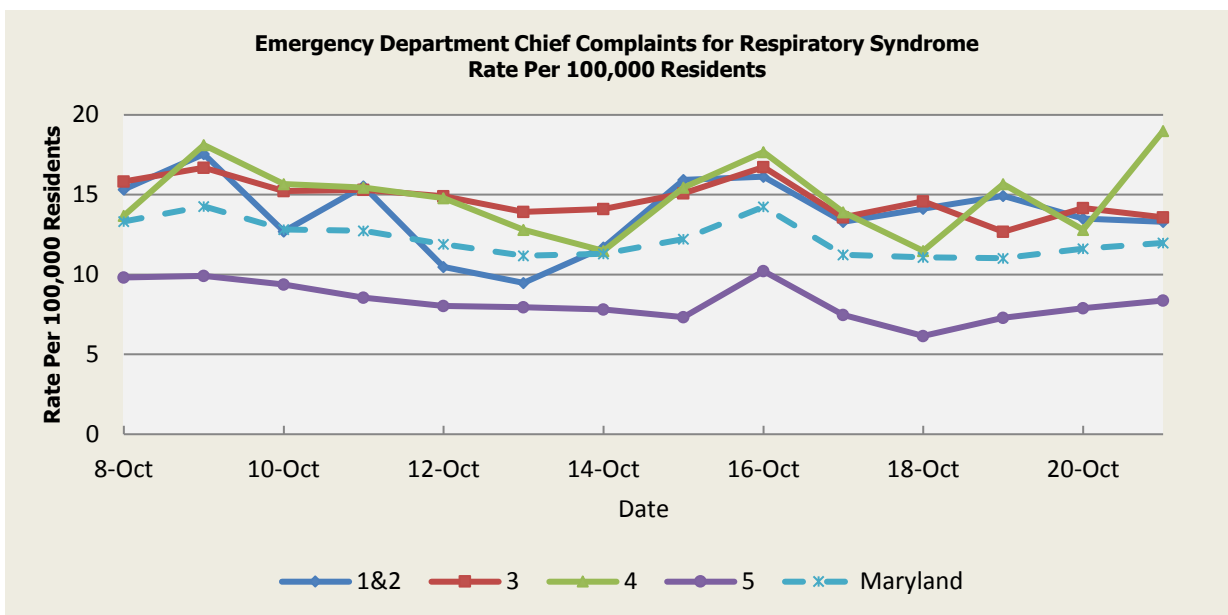
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There were no Gastrointestinal Syndrome outbreaks reported this week.

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.12	14.18	14.48	9.67	12.30
Median Rate*	12.91	14.80	15.02	10.22	12.95

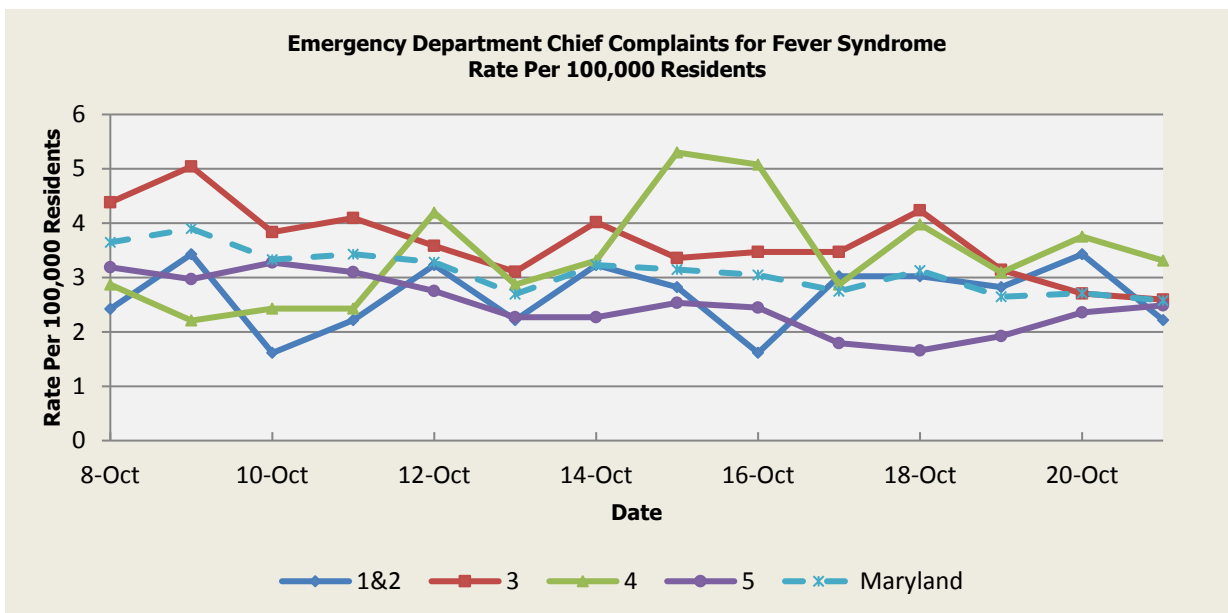
* Per 100,000 Residents



There was one (1) Respiratory Syndrome outbreak reported this week: one (1) outbreak of ILI/Pneumonia in a Nursing Home (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.31	13.57	13.47	9.35	11.76
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

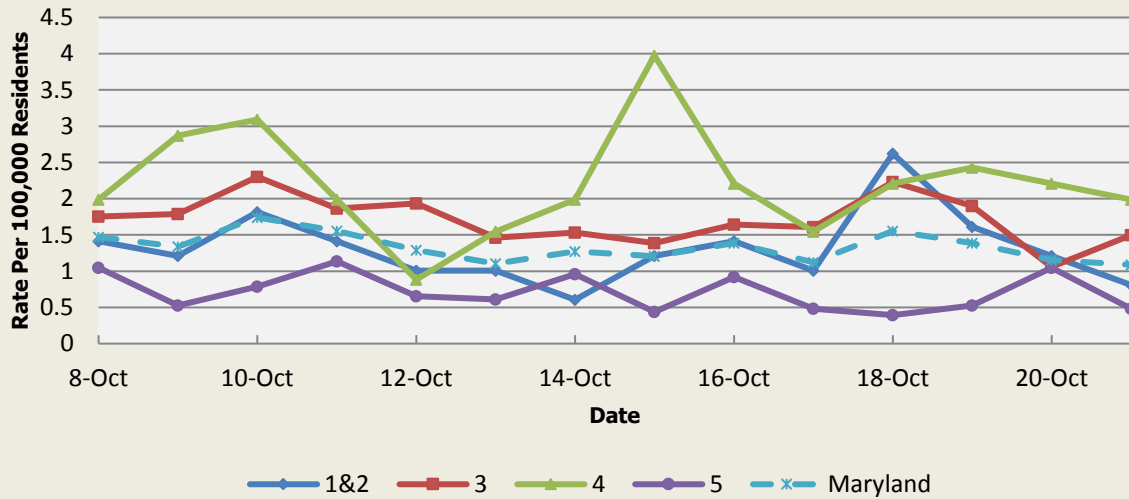


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.84	3.63	3.74	2.89	3.29
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



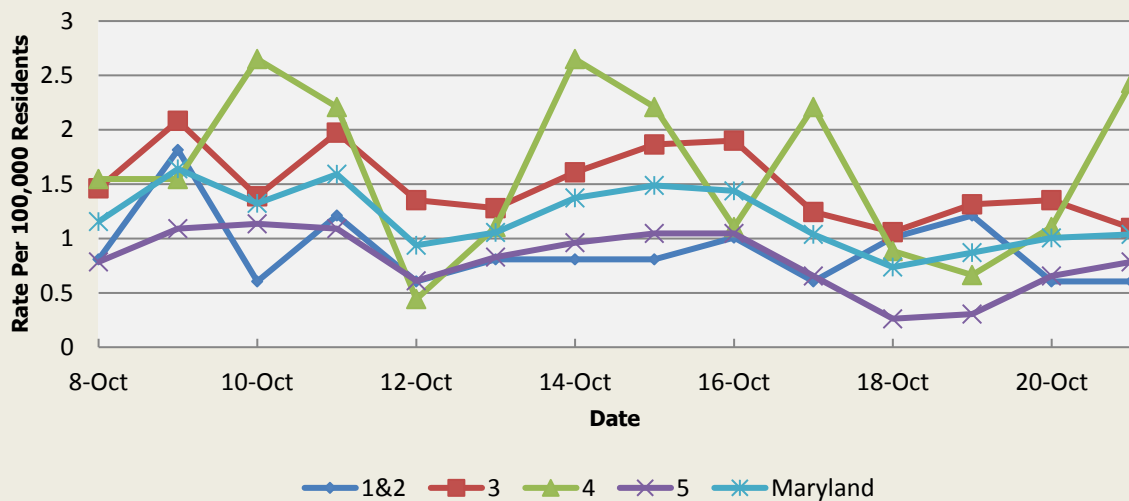
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.98	1.78	1.90	0.90	1.38
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

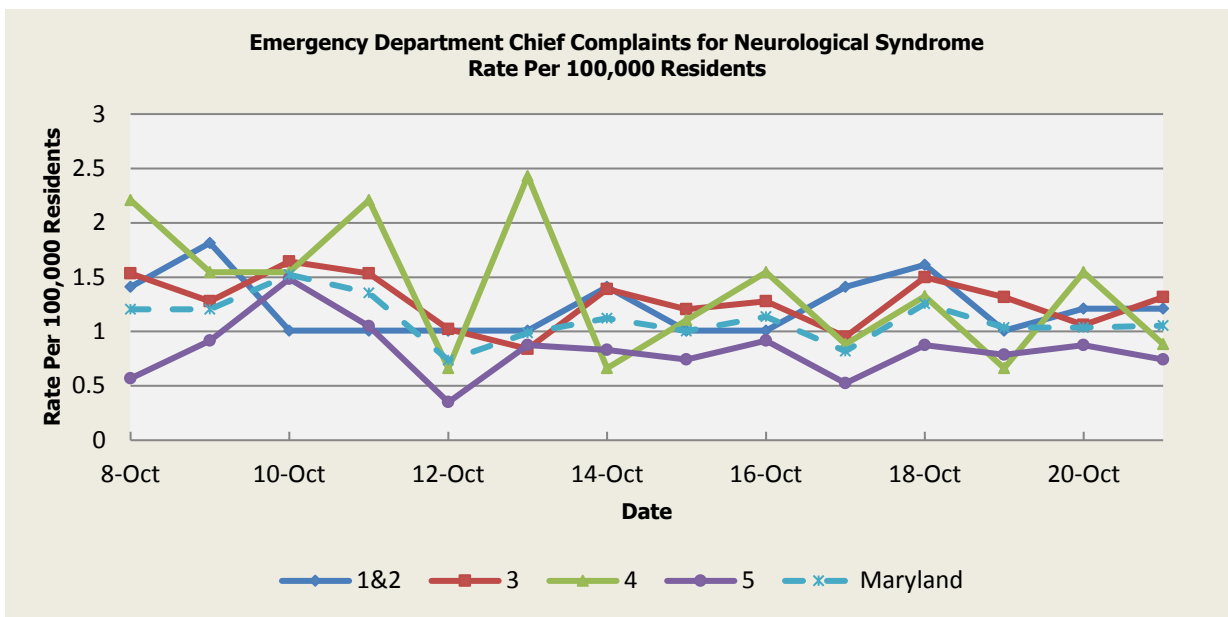


There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.17	1.64	1.66	0.96	1.35
Median Rate*	1.21	1.68	1.77	1.00	1.39

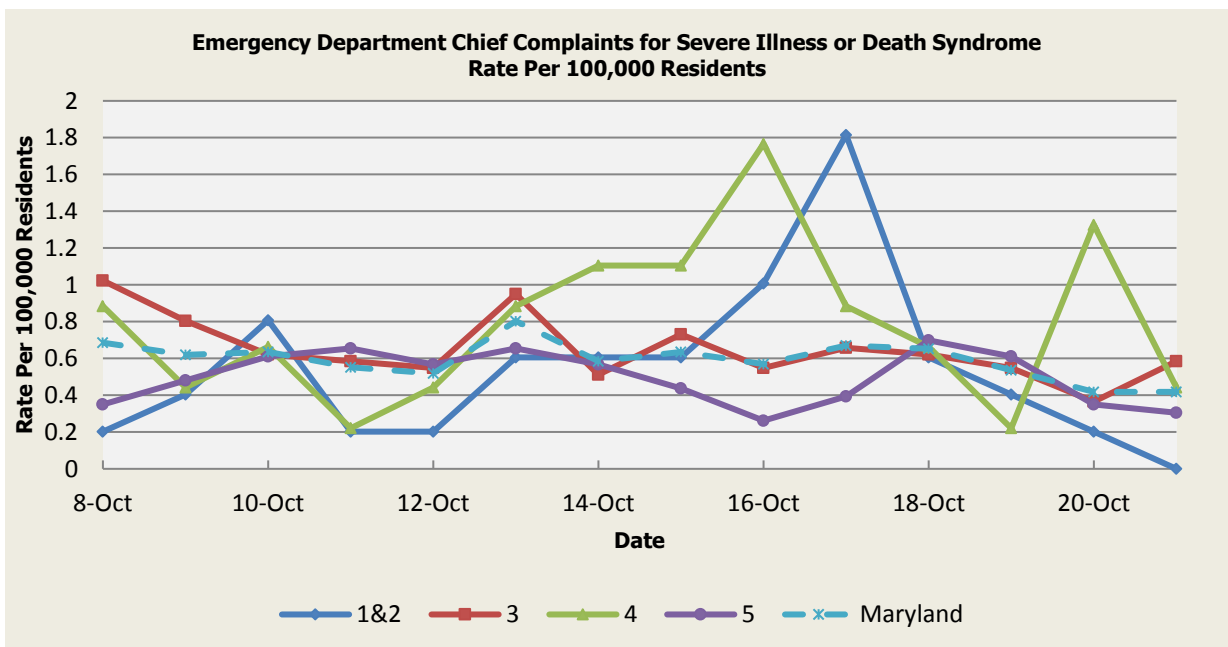
* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.75	0.64	0.48	0.62
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

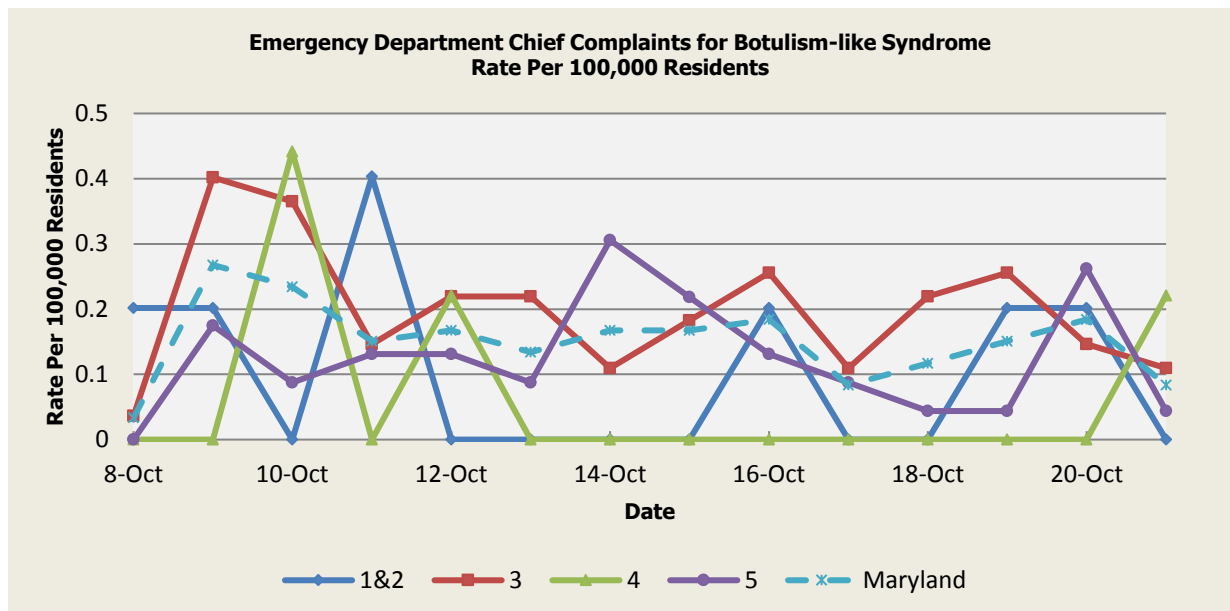


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.87	0.76	0.43	0.67
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

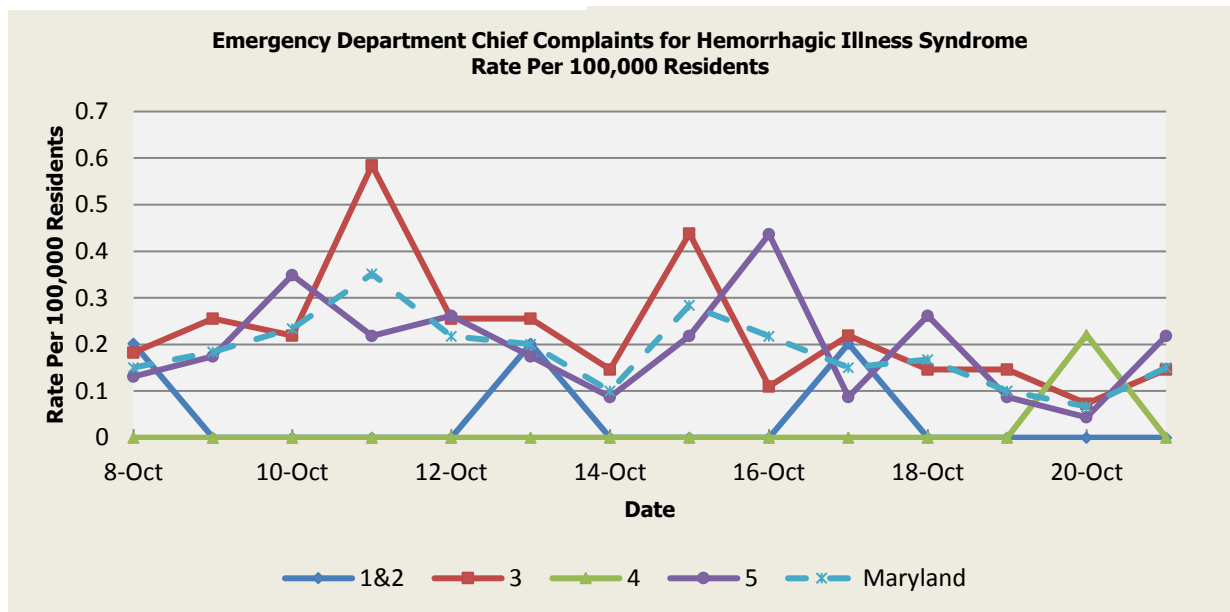
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 10/08 (Regions 1&2), 10/09 (Regions 1&2,3,5), 10/10 (Regions 3,4), 10/11 (Regions 1&2,5), 10/12 (Regions 3,4,5), 10/13 (Region 3), 10/14 (Region 5), 10/15 (Regions 3,5), 10/16 (Regions 1&2,3,5), 10/18 (Region 3), 10/19 (Regions 1&2,3), 10/20 (Regions 1&2,5), 10/21 (Region 4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.05	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

* Per 100,000 Residents

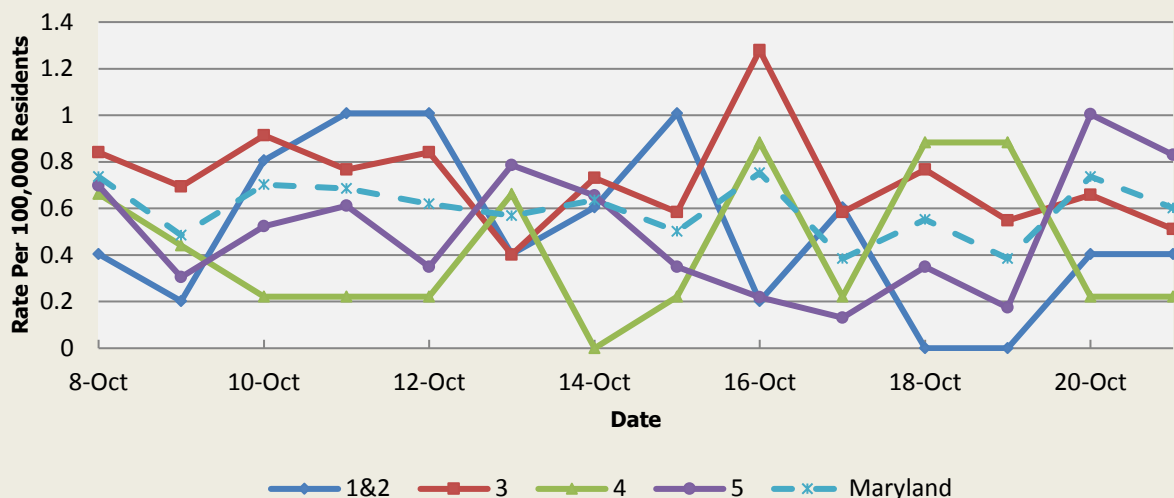


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 10/08 (Regions 1&2), 10/09 (Region 3), 10/10 (Region 5), 10/11 (Regions 3,5), 10/12 (Regions 3,5), 10/13 (Regions 1&2,3), 10/15 (Regions 3,5), 10/16 (Region 5), 10/17 (Regions 1&2), 10/18 (Region 5), 10/20 (Region 4), 10/21 (Region 5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.09
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

Emergency Department Chief Complaints for Lymphadenitis Syndrome Rate Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 10/08 (Regions 4,5), 10/10 (Regions 1&2), 10/11 (Regions 1&2,5), 10/12 (Regions 1&2), 10/13 (Regions 4,5), 10/14 (Regions 1&2,5), 10/15 (Regions 1&2), 10/16 (Regions 1&2,3,4), 10/17 (Regions 1&2), 10/18 (Region 4), 10/19 (Region 4), 10/20 (Region 5), 10/21 (Region 5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.29	0.49	0.33	0.30	0.39
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

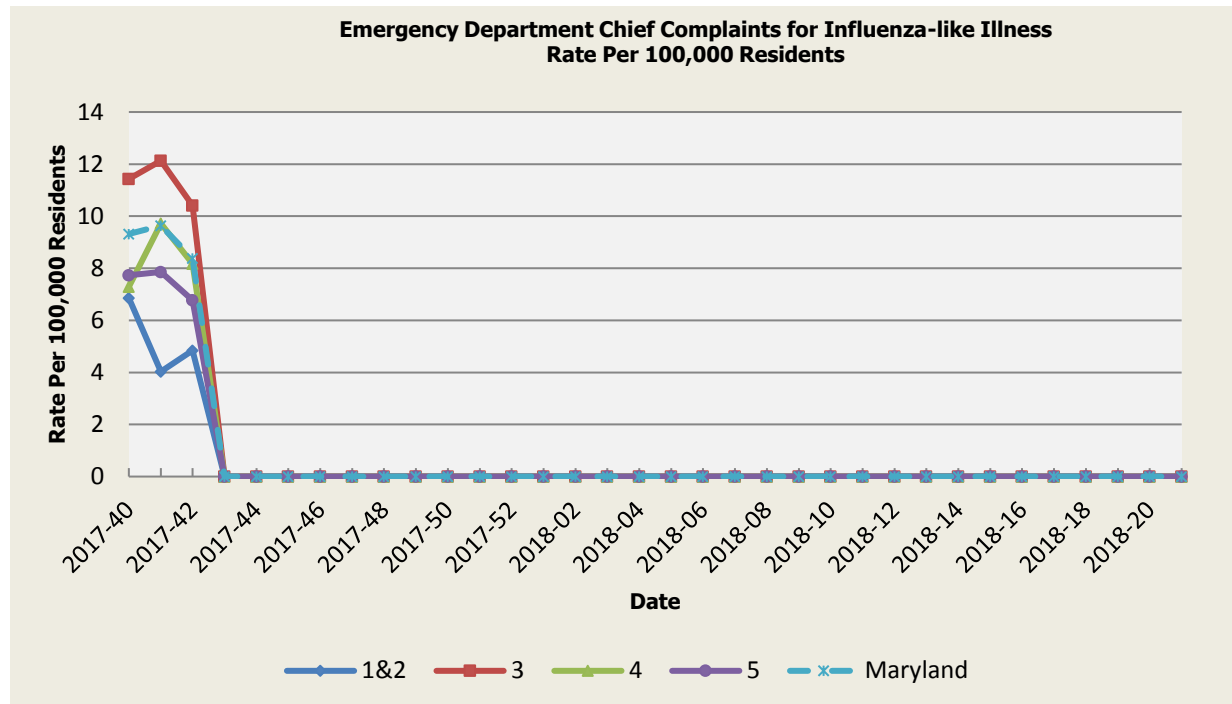
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	September			Cumulative (Year to Date)**		
	2017	Mean*	Median*	2017	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	26	33.2	29	334	386.6	378
Meningococcal disease	0	0.4	0	5	4.4	4
Measles	0	0.2	0	4	4.6	4
Mumps	0	0.8	0	23	41.2	18
Rubella	0	0.2	0	1	4.6	4
Pertussis	5	24.2	20	182	285.2	302
Foodborne Diseases						
Salmonellosis	40	59.6	59	727	820	815
Shigellosis	8	11.8	12	210	175	207
Campylobacteriosis	33	49.6	52	687	656	656
Shiga toxin-producing Escherichia coli (STEC)	10	11.2	8	158	130.6	118
Listeriosis	2	1	1	23	14.8	15
Arboviral Diseases						
West Nile Fever	0	0.6	0	3	14	12
Lyme Disease	107	179.4	152	2977	2691.2	2535
Emerging Infectious Diseases						
Chikungunya	0	2.2	0	0	8.2	0
Dengue Fever	0	2.4	3	20	26.2	18
Zika Virus***	0	2.8	0	3	16.2	7
Other						
Legionellosis	5	15	17	203	157	162

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of October 27, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 62.

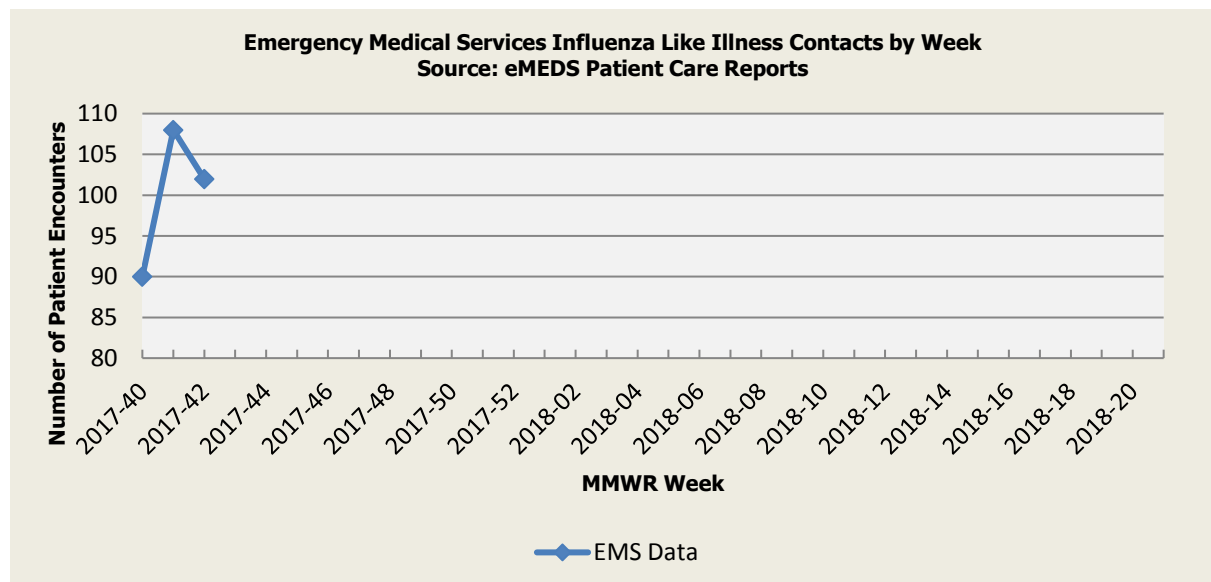
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 42 was: Sporadic Geographic Spread with Minimal Intensity.



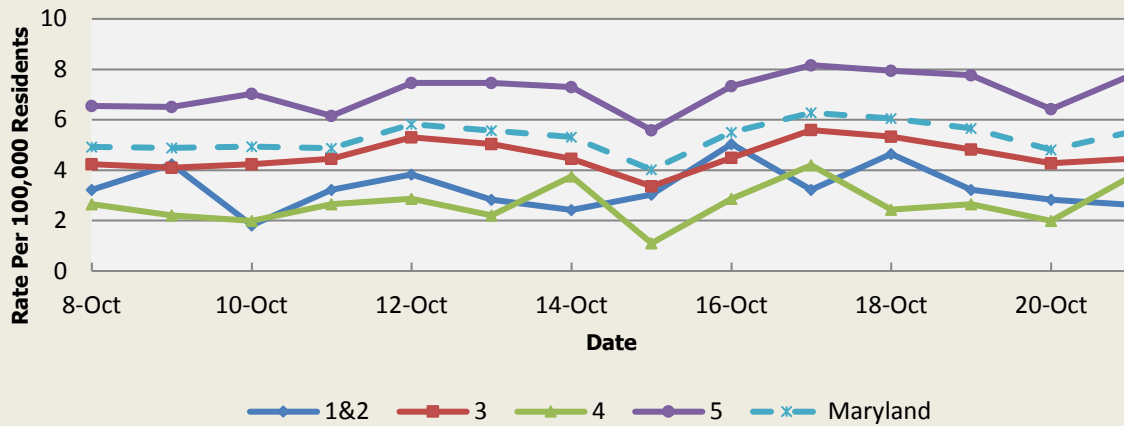
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.70	12.96	11.89	11.24	11.95
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

**Over-the-Counter Medication Sales Related to Influenza
Rate Per 100,000 Residents**

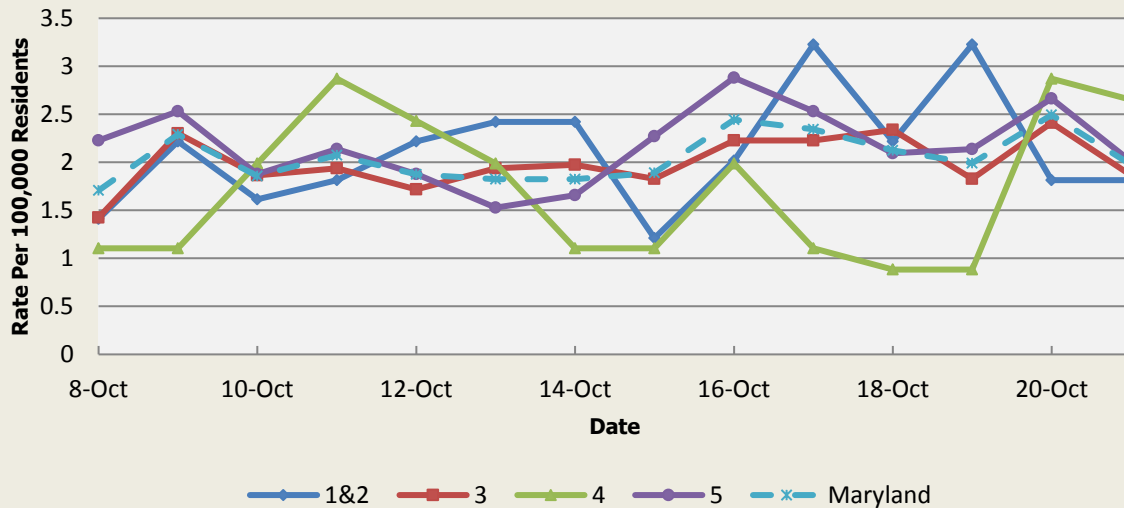


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.54	4.60	2.56	7.93	5.64
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

**Over-the-Counter Thermometer Sales
Rate Per 100,000 Residents**



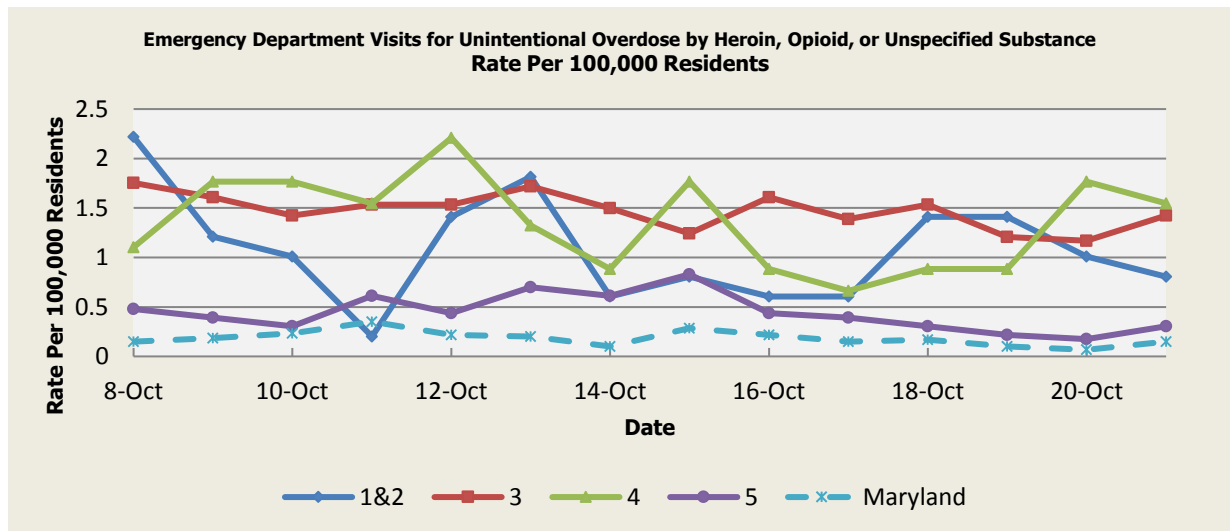
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.16	3.03	2.35	4.06	3.38
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

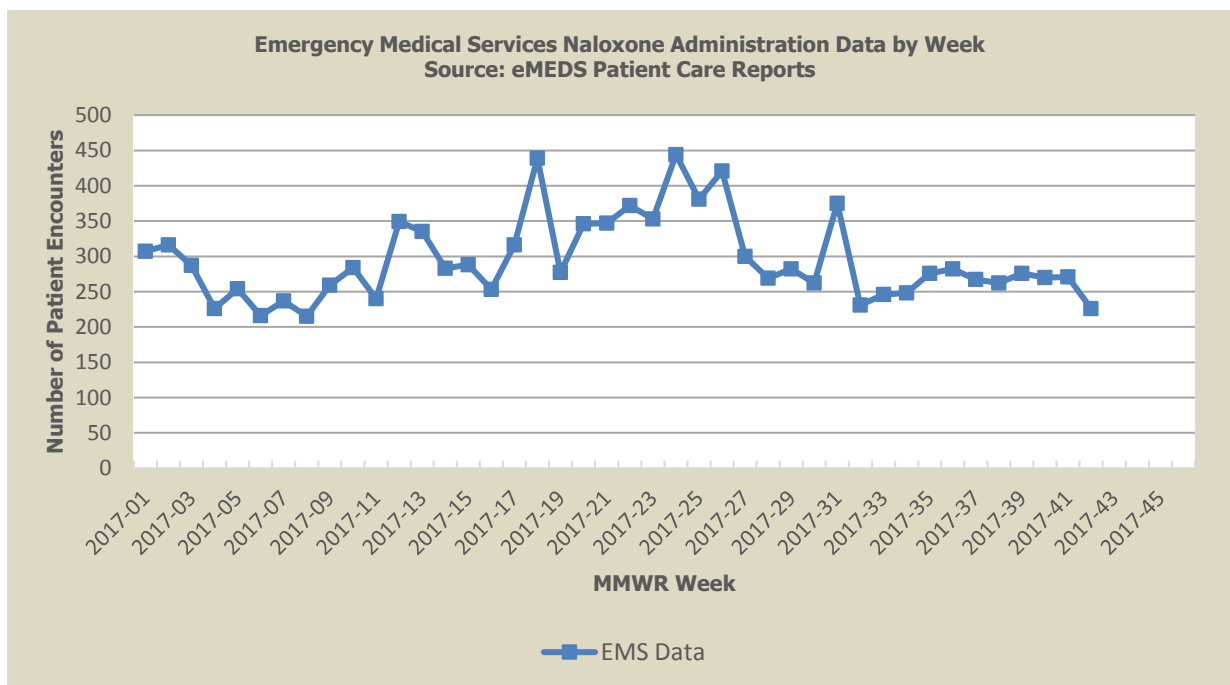
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



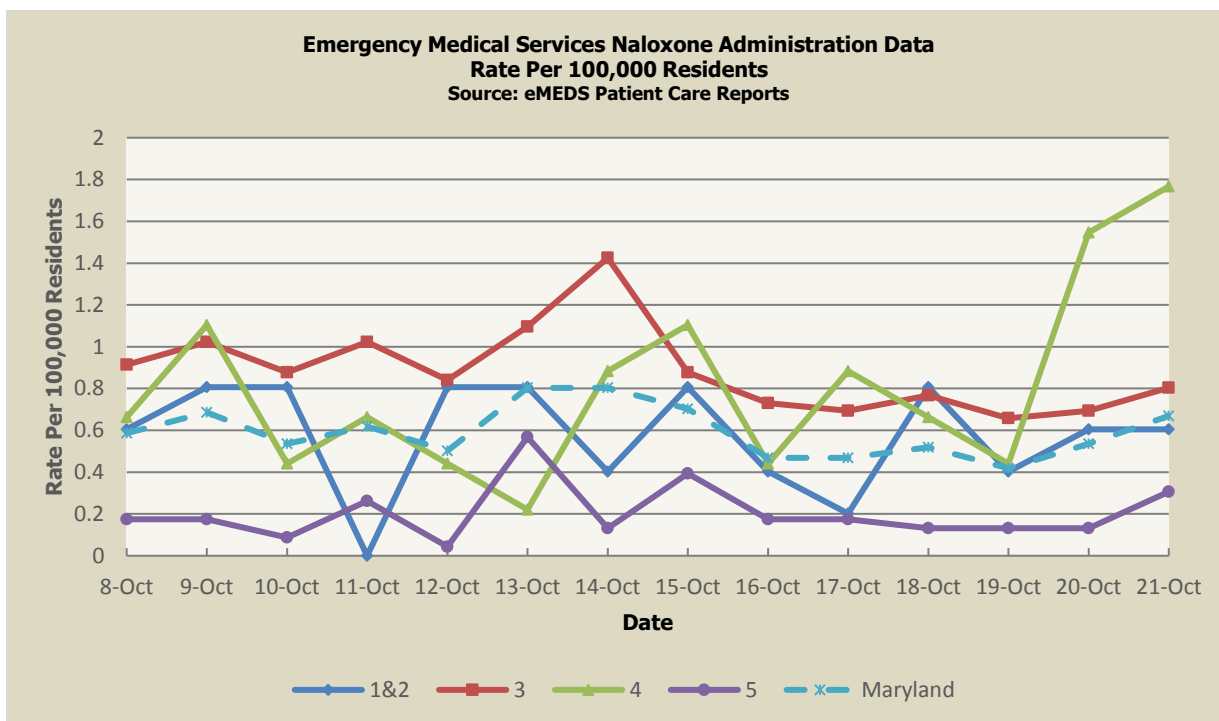
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.39	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.39	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of September 27, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

H5N6 HPAI (CHINA), 21 Oct 2017, China on confirmed an outbreak of bird flu at broiler chicken farms in a central province, the Ministry of Agriculture said in a statement. Flocks are particularly vulnerable to avian flu during the drier winter months, following which outbreaks usually die down. The outbreak in Hexian, a city of about 500 000 people in the province of Anhui, was caused by the H5N6 strain of virus, and has been brought under control. Read More:

<http://www.promedmail.org/post/5395051>

H5N8 HPAI (GERMANY), 21 Oct 2017, A wild duck has been found positive for HPAI H5N8 in the municipality of Osterwald in the German county Bentheim, 25 km from the Dutch city Almelo. The Friedrich-Löffler Institute (FLI) has confirmed the infection officially. The finding has come to light on the basis of the German Wild Bird Monitoring Program. There are no poultry farms in a 3 km radius around the site. No restriction area has been set. Read More:

<http://www.promedmail.org/post/5395412>

HUMAN AVIAN INFLUENZA

There were no reports of human cases of avian influenza in the United States at the time that this report as compiled.

NATIONAL DISEASE REPORTS

LEGIONELLOSIS (NEW YORK CITY), 26 Oct 2017, New York City health officials said that there were more than a dozen confirmed cases of legionnaires' disease in one Queens neighborhood. 1 person living in Flushing remains hospitalized, and another 12 people from the neighborhood have been discharged, after contracting the pneumonia-like disease in recent weeks, according to the New York City Department of Health. Read More: <http://www.promedmail.org/post/5404788>

LEPTOSPIROSIS (PUERTO RICO), 24 Oct 2017, Puerto Rico has reported at least 76 cases of suspected and confirmed leptospirosis, including a handful of deaths, in the month after Hurricane Maria, said Dr. Carmen Deseda, the state epidemiologist for Puerto Rico.

Two deaths involved leptospirosis confirmed through laboratory testing, and "several other" deaths are pending test results, Deseda said. The 76 cases, up from 74 last week, also include one patient with

confirmed leptospirosis who is currently hospitalized. Read More:

<http://www.promedmail.org/post/5401879>

SALMONELLOSIS (LOUISIANA), 24 Oct 2017, A week after softball fundraisers served up jambalaya in a Louisiana town of about 400, state health officials reported a foodborne illness count of 158, with 40 hospitalized. One person who ate the jambalaya has died, but it is not yet known whether a foodborne pathogen was the cause of death. Health officials ordered an autopsy this past week on the body of a 56 year old man, in hopes of making that determination. Read More:

<http://www.promedmail.org/post/5401550>

POWASSAN VIRUS ENCEPHALITIS (NEW YORK), 21 Oct 2017, The New York state Department of Health has confirmed a case of Powassan virus in Dutchess County. The rare tick-borne disease is the county's 1st case this year. The case in Dutchess is the 4th in the state in 2017; the 3 other cases were in Saratoga County over the summer. Bryon Backenson is Deputy Director of the Bureau of Communicable Disease Control with DOH and underscores that Powassan is extremely rare. Read More: <http://www.promedmail.org/post/5395473>

SALMONELLOSIS (MULTI-STATE), 21 Oct 2017, More than 1100 people have contracted salmonellosis from chickens and ducks so far in 2017, with health officials pointing to an increase in backyard coops as the cause. At least one of the cases has resulted in death, with nearly 250 others requiring hospital care. Read More: <http://www.promedmail.org/post/5395792>

INTERNATIONAL DISEASE REPORTS

HANTAVIRUS (PANAMA), 21 Oct 2017, The Ministry of Health (MINSA) in Los Santos province this morning confirmed that a 10-year-old child who was moved, was positive for hantavirus. The epidemiologist Carlos Muñoz stated that this child from Las Tablas Abajo, was admitted to the Joaquin Pablo Franco hospital with a sickle cell-like presentation this past, but since he did not recover and because his platelets declined, a hantavirus test was done. Read More:

<http://www.promedmail.org/post/5395619>

PLAGUE (MADAGASCAR), 21 Oct 2017, Madagascar has been experiencing a large outbreak of plague affecting major cities and other non-endemic areas since August 2017. Between one August and 19 October 2017, a total of 1297 cases (suspected, probable and confirmed) including 102 deaths (case fatality rate 7.9 percent) have been reported. Of these, 846 cases (65.2 percent) were clinically classified as pneumonic plague. Read More: <http://www.promedmail.org/post/5395549>

ANTHRAX (NAMIBIA), 21 Oct 2017, The Southern African region has been warned to brace itself for the spread of anthrax which has killed more than 100 hippos in Namibia. The disease has already spread to Botswana through the Okavango River and has already claimed the lives of 3 hippos. Read More: <http://www.promedmail.org/post/5395947>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

